

REMARKS/ARGUMENTS

The office action of October 27, 2003 has been carefully reviewed and these remarks are responsive thereto. Claims 1, 9, 12, 23, and 37 have been amended, and new claim 47 has been added. Claims 1-47 are pending in this application. Reconsideration and allowance of the instant application are respectfully requested.

Rejections Under 35 U.S.C. § 102

Claims 1, 3, 5, 9, 11, 12, 14, 20, 21, 23, 25, 31, 34, 37, 39, 44 and 45 stand rejected under 35 U.S.C. § 102(e) as being anticipated by McCormick *et al.* (U.S. Pat. No. 6,519,455, hereinafter McCormick). Applicants respectfully traverse this rejection for at least the following reasons.

McCormick describes a system that provides for a typical handoff of a mobile broadcast of information specific to a geographic region (McCormick, Abstract). McCormick, initially, only broadcasts information within a geographic broadcast region 130 (i.e., a cell) pertaining to that particular geographic region (McCormick, Col. 4, lines 29-35). While McCormick describes a system whereby a handoff may occur (McCormick, Col. 4, lines 49-51), McCormick performs the handoff in a manner substantially different from the present invention. In the McCormick system, the serving cell site (MSC 110) transmits a directive to the selected, target cell site, informing the target of the impending hand-off, step 415 (McCormick, Col. 8, lines 51-53). The target MSC 110 then determines what mobile channel (frequency, time slot or code assignment) to which the mobile unit 140 should re-tune to receive the featured broadcast channel having information specific to the geographic region of the target cell site or sector (McCormick, Col. 8, lines 56-61). The serving cell site (MSC 110 via a transceiver 120) then transmits a message to the mobile unit 140 to tune to the broadcast channel of the target cell site, step 420 (McCormick, col 8, line 65 – Col. 9, line 1).

In the McCormick system, the mobile terminal never receives a broadcast message communicating multicast session information for a plurality of cells. The mobile terminal only receives specifically directed information for one cell at a time. In addition, the mobile terminal in McCormick only receives information for the second cell to which the handoff is being made after the serving cell initiates the handoff. In fact, McCormick describes a system whereby the target cell's broadcast channel information is not determined until after the handoff is initiated.

The mobile terminal may already begin suffering or continue suffering from signal degradation while the mobile terminal waits for the serving cell and the target cell to coordinate the handoff. This is exactly one of the types of delay that the present invention was designed to avoid.

Applicants have amended independent claim 1 in order to more clearly recite the invention, namely, that mobile terminals receive a broadcast message communicating multicast session information for a plurality of cells comprising the first cell and a second cell. In order to reject a claim as anticipated under 35 U.S.C. §102, a single prior art reference must teach every aspect of the claimed invention. MPEP § 706.02. Amended claim 1 recites, inter alia, "in a first cell, receiving from a base station corresponding to the first cell, a broadcast message communicating multicast session information for a plurality of cells comprising the first cell and a second cell." As discussed above, McCormick does not teach or suggest this aspect of the claim. McCormick directs messages only to the specific mobile terminal (not a broadcast message) and, even then, only includes information for a single cell at a time. Thus, amended independent claim 1 is allowable because McCormick does not teach every aspect of this claim. Dependent claims 3, 5, and 11 are allowable for at least the same reasons as claim 1.

Independent claim 12 has been amended similarly as claim 1. Therefore amended claim 12 is allowable for similar reasons as claim 1. Dependent claims 14, 20, and 21 are dependent back to base claim 12. Therefore, claims 14, 20, and 21 are allowable for at least the same reasons as claim 12.

Independent claim 23 has been amended similarly as claim 1. Therefore amended claim 23 is allowable for similar reasons as claim 1. Dependent claims 25 and 31 are dependent back to base claim 23. Therefore, claims 25 and 31 are allowable for at least the same reasons as claim 23.

Original claim 34 recites, inter alia, "receiving a session announcement corresponding to a multicast session, the session announcement comprising information that maps link-level access parameters in each of a plurality of cells to the multicast session." As discussed above, McCormick does not describe at least two aspects of this claim. McCormick does not teach or suggest sending a session announcement. Instead, McCormick sends messages directed to the mobile terminal for which the handoff is to occur (McCormick, Col. 8, lines 65-67). In addition, McCormick does not send a message comprising information that maps link-level access parameters in each of a plurality of cells. McCormick only sends messages that each contain

broadcast information for a single cell at any given time. Thus, McCormick does not teach or suggest all the aspects of original claim 34, and Applicants respectfully request the Examiner to indicate that claim 34 is allowable as originally filed.

Independent claim 37 has been amended similarly as claim 1. Therefore amended claim 37 is allowable for similar reasons as claim 1. Dependent claims 39, 44 and 45 are dependent back to base claim 37. Therefore, claims 39, 44 and 45 are allowable for at least the same reasons as claim 37.

Rejections Under 35 U.S.C. § 103

Claims 2, 4, 10, 13, 15, 19, 24, 26, 30, 38 and 40 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over McCormick in view of Aggarwal (U.S. Pat. No. 6,154,463).

In order to reject a claim as obvious under § 103(a), three criteria must exist: 1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings; 2) there must be a reasonable expectation of success; and 3) the prior art reference(s) must teach or suggest all the claim limitations. *See* MPEP § 706.02 (j); *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991).

Applicants submit that claims 2, 4, 10, 13, 15, 19, 24, 26, 30, 38 and 40 are allowable based on the allowability of their respective base claims.

Furthermore, the Office Action cites no motivation in the references or within the level of knowledge of one of ordinary skill in the art to combine the reference teachings. The Federal Circuit has repeatedly stated that the limitations of a claim in a pending application cannot be used as a blueprint to piece together prior art in hindsight, *In re Dembiczak*, 50 U.S.P.Q.2d 1614 (Fed. Cir. 1999), and that the Patent Office should *rigorously* apply the requirement that a teaching or motivation to combine prior art references needs to be provided. *Id.* (emphasis added).

As motivation to combine the references, the Office Action merely states “it would have been obvious to one of ordinary skill in the art at the time of the invention to include session and cell information in order to determine potential hand off targets.” The Office Action alternatively states it would have been obvious “to include a session title to ensure continuity of

the same session during handover of the broadcast.” The Office Action still alternatively states it would have been obvious “to implement the method of McCormick in an IP multicast system in order to provide users roaming access to the internet which is a growing and widely used medium.” However, these are merely results allegedly achieved by the combination, and do not provide the requisite suggestion or motivation to combine the references in the first place. This is exactly the type of hindsight that the Federal Circuit seeks to avoid. Thus, Applicants respectfully submit that there is no motivation or suggestion to combine McCormick with Aggarwal.

In addition, with respect to claims 2, 13, 24 and 38, Aggarwal does not teach or suggest a broadcast message communicating multicast session information... wherein multicast session information comprises a session identifier and a list of cells in which the multicast session is available. Instead, Aggarwal maintains multicast group information in the server (Aggarwal, col. 7, lines 33-39). Aggarwal only describes communicating the information with other servers, not broadcasting the information in a broadcast message, as is recited in the claim.

With respect to claims 4, 15, 26 and 40, Aggarwal does not teach or suggest a title, just as Aggarwal does not teach or suggest a session identifier and a list of cells with claims 2, 13, 24 and 38. Thus claims 4, 15, 26 and 40 are also allowable.

Claims 7, 16, 27, 35 and 41 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over McCormick in view of the Examiner’s official notice. Applicants submit that claims 7, 16, 27, 35 and 41 are allowable based on the allowability of their respective base claims.

Improper Claim Rejections

As indicated above, claim 9 stands rejected under 35 U.S.C. § 102(e) as being anticipated by McCormick. Applicants respectfully submit that the rejection of claim 9 is improper, and Applicants have amended claim 9 to be in independent form.

The Office Action, at page 2, paragraph 3, rejects claim 9 under 35 U.S.C. § 102(e) as anticipated by McCormick. However, the Office Action provides no basis for a rejection under McCormick. Instead, the Office Action, at paragraph 4 on page 3, appears to reject claim 9 under Aggarwal, which would necessitate making the rejection under 35 U.S.C. § 103(a). In addition, the

text in the present Office Action regarding claim 9 appears to be identical to the text in the Office Action dated March 28, 2003 regarding the then rejection of claim 9 under 102(e) as anticipated by Aggarwal. However, the Office Action appears to withdraw the 102(e) rejection over Aggarwal since the present Office Action provides new grounds for rejection for claim 9. Thus, Applicants submit that the rejection of claim 9 is improper because Applicants cannot determine whether the rejection is under 35 U.S.C. § 102 or 35 U.S.C. § 103, and also whether the rejection is based on McCormick, Aggarwal, or both.

In addition, Applicants note that claims 6, 18, 22, 29, 33, 43 and 46, while apparently rejected according to the Office Action summary, are not identified in specific rejection captions within the Office Action (headings at paras. 3, 5, 6, 7). Applicants further note that claims 6, 18, 22, 29, 33, 43 and 46, while discussed in the detailed portion of the §102(e) rejection, appear to be rejected with respect to Aggarwal. Thus, Applicants submit that the rejection of claims 6, 18, 22, 29, 33, 43 and 46 is improper.

Given that the rejection of claims 6, 9, 18, 22, 29, 33, 43 and 46 are improper, Applicants respectfully submit that, in the event the Examiner maintains the rejection of these claims, a final rejection of claims 6, 9, 18, 22, 29, 33, 43 and/or 46 would be improper.

New Claims

Applicants have added new claim 47. Applicants respectfully submit that new claim 47 is allowable over the art of record because, as discussed above, the prior art of record does not teach or suggest, prior to determining that a handoff from a first cell to a second cell should be made for a mobile terminal located in the first cell, transmitting from a base station corresponding to the first cell, a broadcast message communicating multicast session information for a plurality of cells comprising the first cell and the second cell.

CONCLUSION


All rejections having been addressed, Applicants respectfully submit that the instant application is in condition for allowance, and respectfully solicit prompt notification of the same. However, if for any reason the Examiner believes the application is not in condition for allowance

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or there are any questions, the examiner is requested to contact the undersigned at (202) 824-3153.

Respectfully submitted,
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Dated this 30 day of Dec., 2003

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